

**What Is Claimed Is:**

1           1.    A flat panel display, comprising:

2           a plurality of scan lines and a plurality of signal lines  
3                intersecting to define a plurality of pixel regions;  
4           a main shielding structure having a plurality of main spacings  
5                substantially corresponding to the pixel regions and a  
6                plurality of gaps, wherein each gap substantially  
7                corresponds to one of the scan lines or signal lines, each  
8                main spacing is connected to at least one of the gaps, and  
9                each gap is connected to two adjacent main spacings; and  
10          a plurality of complementary shielding structures corresponding  
11                to the gaps.

1           2.    The flat panel display of claim 1, further comprising a  
2           plurality of pixel electrodes disposed in the pixel regions.

1           3.    The flat panel display of claim 2, wherein a plurality of  
2           stripe-shaped shielding layers are disposed between the signal lines  
3           and the pixel electrodes and overlapping the pixel electrodes and  
4           the main shielding structure.

1           4.    The flat panel display of claim 3, wherein  
2           a first portion of the complementary shielding structures  
3                correspond to a first portion of the gaps substantially  
4                corresponding to the signal lines and comprise a plurality  
5                of first complementary shielding layers partially  
6                overlapping the signal lines and the main shielding  
7                structure and contacting the stripe-shaped shielding  
8                layers; and  
9           a second portion of the complementary shielding structures  
10               correspond to a second portion of the gaps substantially

11 corresponding to the scan lines and comprise a plurality  
12 of second complementary shielding layers partially  
13 overlapping the pixel electrodes and the main shielding  
14 structure and contacting the scan lines.

1 5. The flat panel display of claim 4, further comprising a  
2 plurality of capacitors adjacent to the scan lines and corresponding  
3 to the second portion of the gaps.

1 6. The flat panel display of claim 3, wherein  
2 a first portion of the complementary shielding structure  
3 correspond to a first portion of the gaps substantially  
4 corresponding to the signal lines and comprise a plurality  
5 of third complementary shielding layers partially  
6 overlapping the stripe-shaped shielding layers and the  
7 main shielding structure and contacting the signal lines;  
8 and  
9 a second portion of the complementary shielding structure  
10 correspond to a second portion of the gaps substantially  
11 corresponding to the scan lines and comprise a plurality  
12 of second complementary shielding layers partially  
13 overlapping the pixel electrodes and the main shielding  
14 structure and contacting the scan lines.

1 7. The flat panel display of claim 6, further comprising a  
2 plurality of capacitors adjacent to the scan lines and corresponding  
3 to the second portion of the gaps.

1 8. The flat panel display of claim 3, wherein  
2 a first portion of the complementary shielding structure  
3 correspond to a first portion of the gaps substantially  
4 corresponding to the signal lines and comprise a plurality

of first and third complementary shielding layers overlapping each other, the first complementary shielding layers partially overlap the signal lines and the main shielding structure and contacting the stripe-shaped shielding layers, the third complementary shielding layers partially overlap the stripe-shaped shielding layers and the main shielding structure and contacting the signal lines; and

a second portion of the complementary shielding structure corresponds to a second portion of the gaps substantially corresponding to the scan lines and comprise a plurality of second complementary shielding layers partially overlapping the pixel electrodes and the main shielding structure and contacting the scan lines.

9. The flat panel display of claim 8, further comprising a plurality of capacitors adjacent to the scan lines and corresponding to the second portion of the gaps.

10. The flat panel display of claim 3, wherein the complementary shielding structures correspond to the gaps substantially corresponding to the signal lines and comprise a plurality of first complementary shielding layers partially overlapping the signal lines and the main shielding structure and contacting the stripe-shaped shielding layers.

11. The flat panel display of claim 3, wherein the complementary shielding structure correspond to the gaps substantially corresponding to the signal lines and comprise a plurality of third complementary shielding layers partially overlapping the stripe-shaped shielding layers and the main shielding structure and contacting the signal lines.

12. The flat panel display of claim 3, wherein the complementary shielding structure correspond to the gaps substantially corresponding to the signal lines and comprise a plurality of first and third complementary shielding layers overlapping each other, the first complementary shielding layers partially overlap the signal lines and the main shielding structure and contacting the stripe-shaped shielding layers, the third complementary shielding layers partially overlap the stripe-shaped shielding layers and the main shielding structure and contacting the signal lines.

13. The flat panel display of claim 1, wherein the gaps substantially correspond to the scan lines, the main shielding structure comprises a plurality of fishbone-shaped layers physically separated from each other by a plurality of fishbone-shaped spacings and are parallel with the signal lines, each fishbone-shaped spacing is composed of the main spacings and the gaps.

14. The flat panel display of claim 1, wherein the gaps substantially correspond to the signal lines, the main shielding structure comprises a plurality of fishbone-shaped layers physically separated from each other by a plurality of fishbone-shaped spacings and are parallel with the scan lines, each fishbone-shaped spacing is composed of the main spacings and the gaps.

15. The flat panel display of claim 1, further comprising:  
a plurality of common electrodes;  
a pixel electrode disposed between the common electrodes; and  
a common electrode line connected to the common electrodes and  
composed of opaque material;  
wherein portions of the common electrode line under the gaps  
are the complementary shielding structures.

16. A flat panel display, comprising:

a first substrate including

a plurality of scan lines and a plurality of signal lines  
intersecting to define a plurality of pixel regions,  
a plurality of pixel electrodes disposed in the pixel  
regions,

a plurality of stripe-shaped shielding layers disposed  
between the signal lines and the pixel electrodes and  
overlapping the pixel electrodes,

a plurality of complementary shielding structures;

a second substrate including

a main shielding structure having a plurality of main  
spacings substantially corresponding to the pixel  
regions and a plurality of gaps, wherein each gap  
substantially corresponds to one of the scan lines  
or signal lines, each main spacing is connected to  
at least one of the gaps, and each gap is connected  
to two adjacent main spacings,

a color filter disposed on the main shielding structure;

and

a liquid crystal sealed between the first and the second  
substrates,

wherein the complementary shielding structures correspond to  
the gaps.

17. A flat panel display, comprising:

first and second scan lines parallel to each other in a first  
direction;

first and second signal lines parallel to each other in a second direction, wherein the first and second scan lines and the first and second signal lines define a pixel region; a main shielding structure having a main spacing substantially corresponding to the pixel region and a gap to be connected to the main spacing and an adjacent main spacing; and a complementary shielding structure disposed under the gap to partially overlap the main shielding structure.

18. The flat panel display of claim 17, wherein the gap is over the first scan line, a first pixel electrode is disposed under the main spacing, a second pixel electrode is disposed under the adjacent main spacing, the first and second pixel electrodes are controlled by the first signal line.

19. The flat panel display of claim 18, wherein a capacitor is adjacent to the first scan line and corresponds to the gap.

20. The flat panel display of claim 18, wherein a complementary shielding structure is adjacent to the first scan line.

21. The flat panel display of claim 17, wherein the gap is over the first signal line, a first pixel electrode is disposed under the main spacing, a second pixel electrode is disposed under the adjacent main spacing, the first and second pixel electrodes are controlled by the first scan line.

22. The flat panel display of claim 21, further comprising first and second stripe-shaped layers at both sides of the first signal line; and first and second complementary shielding layers constituting the complementary shielding structure to partially overlap the first signal line and the main shielding structure and

contact the first and second stripe-shaped shielding layer  
respectively.

23. The flat panel display of claim 21, further comprising  
first and second stripe-shaped layers at both sides of the first  
signal line; and  
first and second complementary shielding layers constituting  
the complementary shielding structure to partially overlap  
the first and second stripe-shaped layer and the main  
shielding structure and contact the first signal line.

24. The flat panel display of claim 21, further comprising  
first and second stripe-shaped layers at both sides of the first  
signal line; and  
first, second, third and fourth complementary shielding layers  
constituting the complementary shielding structure,  
wherein the first and second complementary shielding  
layers overlap the main shielding structure and contact  
the first and second stripe-shaped shielding layer  
respectively, the third and fourth complementary shielding  
layers overlap the main shielding structure and contact  
the first signal line, and the first and second  
complementary shielding layers overlap the third and  
fourth complementary shielding layers.